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HERTFORDSHIRE COUNTY COUNCIL.

ANNUAL REPORT

ON

SCHOOL HEALTH

(TWENTY-FIRST)

CONCERNING PUBLIC ELEMENTARY SCHOOLS IN

HERTFORDSHIRE

RELATING TO THE YEAR

1928

BY

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School Medical Officer and County Medical Officer of Health.

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MEDICAL INSPECTION STAFF.

School Medical Officer.

H. HYSLOP THOMSON, M.D., D.P.H.

County Medical Office, Hertford.

Assistant School Medical Officers.

- * **BALLANCE, A. C., B.Ch.** ... Hatfield Rural.
Westfield, Hatfield.
- BARKER, A., B.Ch.,** Sawbridgeworth Urban and Hadham Rural
Manor House, Much Hadham. (part of).§
- BUCHANAN, J., M.B.** ... Watford Borough (part of).†
20, Station Road, Watford.
- * **CLARKE, A. E., M.D., M.R.C.S.** Rickmansworth Urban.
Rickmansworth.
- * **COX, W. J., M.B., D.P.H.** ... Watford Borough (part of).¶
Municipal Offices, Watford.
- * **DUNN, R. A., M.D., D.Hy.** ... Bishop's Stortford, Hertford, Hoddesdon and
The Cedars, Bengoe, Hertford. Ware Urban, and Hertford and Ware
Rural (part of).||
- * **FRASER, H., M.B., C.M.** ... Harpenden Urban.
Harpenden.
- GRATTAN, H. W., M.R.C.S.,** Welwyn Garden City Urban and Welwyn
F.R.C.P., D.P.H. Rural.
Bridge Road, Welwyn Garden City.
- GROSS, MALCOM, M.B., D.P.H.** Berkhamstead and Tring Urban, Berkham-
Town Hall Hemel Hempstead. stead and Hemel Hempstead Rural.
- * **GROSVENOR, A. A., M.D.** ... Stevenage Urban.
Stevenage.
- * **HARDIE, C. F., M.A., M.B.,** Barnet Urban and Barnet Rural.
L.R.C.P.
Highfield, Wood Street, Barnet.
- * **HARVEY, W., M.D., D.P.H.,** Bushey and Chorleywood Urban, Watford
Council Offices, Bushey. Rural.
- HINE, A. L., L.R.C.P., M.R.C.S.,** National Children's Home School.
Kirkwick Avenue, Harpenden.
- * **MACFADYEN, N., M.B.,** Hitchin, Letchworth and Royston Urban,
Letchworth. M.R.C.S., D.P.H. Ashwell and Hitchin Rural.
- * **McCLYMONT, J., M.D.** ... Cheshunt Urban.
Enfield.
- * **PATON, R. R. K., M.B., Ch.B.,** St. Albans City and Rural.
D.P.H.
*The Gables, New House Park
Gardens, St. Albans.*
- * **ROSE, A., M.A., M.B., Ch.B.** ... East Barnet Valley Urban.
*Cranbourne House, Station Road,
New Barnet.*
- * **SUGGIT, B., M.B., C.H.B.** ... Baldock Urban.
Baldock.
- WIGFIELD, F. P., M.B., B.S.** Buntingford, Hadham (part of)§ and Ware
Puckeridge. Rural (part of).||

SCHOOL-NURSING STAFF.

FOUR HEALTH VISITORS and SCHOOL NURSES.

88 NURSES of Local Nursing Associations.

- * Medical Officer of Health.
- † Alexandra, Callow Land, St. Andrew's, and Victoria C.C. Schools.
- § High Wych, Allen's Green, and Thorley under Dr. Barker, rest of Hadham R.D. under Dr. Wigfield.
- || Great Munden, Little Munden, Puckeridge C.E., Puckeridge R.C., and Standon under Dr. Wigfield, rest of Ware R.D. under Dr. Dunn.
- ¶ Beechen Grove C.C., Central C.C., Chater C.C., Parkgate Road C.C., Field C.C., Holy Rood R.C., Oxhey C.C., and Defective Schools.

Annual Report on School Health.

CHAPTER I.—ADMINISTRATION.

The following Report, which is the twentieth of its series, gives particulars of the work of School Medical Inspection and of the treatment of defects in school children carried out during the year.

In the following tables particulars are given of the work of the respective Assistant School Medical Officers during the year.

In Table I particulars are given regarding the population and the average number of children on the books in the Urban and Rural Districts. The estimated population for the county for 1928 was 378,200, compared with 364,100 for 1927, and the average number of children on the books 41,700, compared with 41,255 for the previous year.

Table II gives information regarding the actual number of inspections and visits to schools made by the Assistant School Medical Officers during the year. If the various columns are referred to it will be seen that the work has on the whole been efficiently carried out, as with two exceptions all the Assistant School Medical Officers made more visits to the schools than were actually required.

TABLE I.—Areas of Assistant School Medical Officers.

Districts.	Acreage.	Estimated Population, 1928.	Average Number of Children on Books.	Assistant School Medical Officer.
<i>Urban.</i>				
1 Baldock . . .	362	2,970	361	Suggit, B.
2 Barnet . . .	3,114	13,970	1,550	Hardie, C. F.
3 Berkhamstead . .	1,208	7,583	782	Gross, M.
4 Bishop's Stortford	3,371	9,606	967	Dunn, R. D.
5 Bushey . . .	3,081	10,010	897	Harvey, W.
6 Cheshunt . . .	8,479	4,420	2,050	McClymont, J.
7 Chorleywood . .	1,989	3,169	192	Harvey, W.
8 East Barnet Valley	2,644	15,710	1,544	Rose, A.
9 Harpenden . . .	1,633	7,632	872	{ Fraser, H.
10 Hemel Hempstead	7,184	14,950	—	{ Hine, A. L.
11 Hertford . . .	1,501	11,370	1,316	Dunn, R. A.
12 Hitchin . . .	3,675	13,650	1,616	Macfadyen, N.
13 Hoddesdon . . .	1,576	5,375	802	Dunn, R. A.
14 Letchworth . . .	3,652	12,930	1,858	Macfadyen, N.
15 Rickmansworth . .	2,790	9,355	953	Clarke, A. E.
16 Royston . . .	1,003	3,828	427	Macfadyen, N.
17 St. Albans . . .	2,703	27,350	3,203	Paton, R. R. K.
18 Sawbridgeworth . .	2,678	2,532	412	Barker, A.
19 Stevenage . . .	4,545	5,646	572	Grosvenor, A. A.
20 Tring . . .	4,407	4,152	513	Gross, M.
21 Ware . . .	629	6,210	950	Dunn, R. A.
22 Watford . . .	2,238	54,460	6,324	{ Buchanan, J.
23 Welwyn Garden City		7,772	807	{ Cox, W. J.
				Grattan, H. W.
Total Urban . . .	64,462	264,650	28,968	
<i>Rural.</i>				
1 Ashwell . . .	22,049	3,482	391	Macfadyen, N.
2 Barnet . . .	9,216	5,300	559	Hardie, C. F.
3 Berkhamstead . .	18,383	5,078	615	Gross, M.
4 Buntingford . . .	28,470	4,796	691	Wigfield, F. P.
5 Hadham . . .	25,468	5,345	640	{ Barker, A.
6 Hatfield . . .	23,486	9,889	1,351	Ballance, A. C.
7 Hemel Hempstead	19,994	7,961	1,026	Gross, M.
8 Hertford . . .	33,468	7,494	959	Dunn, R. A.
9 Hitchin . . .	55,174	14,180	1,986	Macfadyen, N.
10 St. Albans . . .	37,066	18,050	1,474	Paton, R. R. K.
11 Ware . . .	33,953	11,500	1,422	{ Dunn, R. A.
12 Watford . . .	26,854	17,130	1,188	{ Wigfield, F. P.
13 Welwyn . . .	6,480	3,345	430	Harvey, W.
				Grattan, H. W.
Total Rural . . .	340,061	113,550	12,732	
Total for County	404,523	378,200	41,700	

TABLE II.—Medical Inspection and Visits, 1928.

	(1) Number of Schools.	(2) Average number of Children on Books.	(3) Estimated number of Inspections re- quired.	(4) Actual number of Inspections made.	(5) Minimum number of School-visits re- quired, one per term.	(6) Number of School- visits paid.
Dr. Ballance . .	10	1,351	416	470	30	41
Dr. Barker . .	6	553	170	250	13	18
Dr. Buchanan . .	4	3,176	977	1,220	12	64
Dr. Clarke . .	4	953	293	215	12	11
Dr. Cox . .	8	3,148	969	1,253	24	50
Dr. Dunn . .	45	6,106	1,879	2,365	135	146
Dr. Fraser . .	3	699	215	214	9	11
Dr. Grattan . .	7	1,237	381	517	21	40
Dr. Gross . .	23	3,067	944	1,489	69	88
Dr. Grosvenor . .	2	572	176	223	6	10
Dr. Hardie . .	10	2,109	649	847	30	46
Dr. Harvey . .	15	2,277	701	791	30	25
Dr. Hine . .	1	173	53	68	1	1
Dr. Macfadyen . .	46	6,278	1,932	2,185	138	191
Dr. McClymont . .	10	2,050	631	789	30	33
Dr. Paton . .	23	4,547	1,399	1,546	69	83
Dr. Rose . .	6	1,544	475	629	18	29
Dr. Suggit . .	2	361	111	139	6	10
Dr. Wigfield . .	22	1,499	461	602	66	68
Totals . .	247	41,700	12,832	15,812	724	965

The children detailed for inspection during 1929 are :—

- (a) those newly admitted to school life,
- (b) those born in the year 1921,
- (c) those born in the year 1917,
- (d) those not previously inspected and known to be about to leave school.

TABLE III.—Inspections, Refusals, and Presence of Parents, 1928

Sex.	District.	Inspections.			Total.	Refusals.	Percentage.	Parents present.	Percentage.*
		Entrants.	Born in 1920.	Born in 1916 and Leavers.					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Boys	Urban . . .	1866	2070	1540	5476	1	·02	959	51·4
	Rural . . .	816	926	666	2408	—	—	288	35·3
	Urban and Rural	2682	2996	2206	7884	1	·01	1247	46·5
Girls	Urban . . .	1855	2117	1591	5563	1	·02	949	51·1
	Rural . . .	727	949	689	2365	2	·08	244	33·6
	Urban and Rural	2582	3066	2280	7928	3	·04	1193	46·2
Boys and Girls	Urban . . .	3721	4187	3131	11039	2	·02	1908	51·3
	Rural . . .	1543	1875	1355	4773	2	·04	532	34·5
	Urban and Rural	5264	6062	4486	15812	4	·02	2440	46·3

* Percentage of parents present at first inspections.

Table III gives the number of children examined in the various age groups. These groups are entrants, children 8 years of age, children 12 years of age, and leavers who were not previously examined at the age of 12. There were 4 refusals during the year. The percentage of parents present at the medical inspections was 46·3 compared with 42·6 last year.

CHAPTER II.—REPORTS OF ASSISTANT SCHOOL MEDICAL OFFICERS.

One of the duties of the Assistant School Medical Officers is to submit at the end of each year a report dealing with the work of School Medical Inspection in the schools in their districts during the previous twelve months. In these reports reference is made to various aspects of the work of School Medical Inspection, which are of interest and value in relation to the administration of the scheme. Some of the points referred to by the Assistant School Medical Officers are also distinctly of local interest. In the reports for the year 1928, special reference is made in several of them to the measures to be carried out in preventing the development and spread of infectious diseases in the School. This subject is further considered in Chapter III. In the present chapter extracts from the reports received from the Assistant School Medical Officers are given ; some of the reports, however, which consist chiefly of statistical tables although giving valuable information, are not quoted, while one or two were received too late to be referred to.

Dr. Dunn (Hertford).

The usual routine inspections have been carried out. The total number of children inspected has steadily increased year by year during the last three years. The number is now practically the same as in 1914, which was my previous highest total.

With regard to school closure, I am still of opinion that little benefit accrues from closing for measles, whooping cough, chicken pox or mumps, on the other hand, good may result when closure is applied for diphtheria and in some outbreaks of scarlet fever. The " following up " of defects by the nurses is certainly continuing to produce good results, and most of the defects receive attention. Thanks to their efforts, the standard of cleanliness is well maintained.

Dr. Macfadyen (Letchworth).

The number of children examined this year has increased, especially in Letchworth and Hitchin Urban and Rural. There is a decrease in the number of defects found and this probably is the result of work done in attending to defects found in previous years. The good results are found mostly where there is a nurse who is well known and trusted in the Parish. Improve-

ment must now be looked for where the personal touch is most obvious. Instruction especially in right feeding is still wanted, and is given to parents wherever possible. Experiments in the great value of milk as a food have recently given remarkable results, and should be made known. The knowledge of the relative value of milk as a food is generally received with polite incredulity. Education in matters of health is wanted, and if some society would promote a travelling cinema with a few striking pictures to tour the villages, it would be a great help and worth while sending round our county. If these pictures had a simple story attached to them they would be well received and be a great power for education.

Dr. Cox (Watford).

The Medical Officer of Health of the Borough of Watford is responsible for the medical inspection of the following schools:—

Chater, Field, Parkgate Road, Holy Rood Roman Catholic, Beechen Grove Boys, Higher Elementary and Beechen Grove Special, and the following report therefore relates chiefly to these schools.

Most of the usual epidemics of illness occurred in connection with the schools during the year, but it was not found necessary to close any on this account. Several certificates were given stating that the fall in the average attendance at certain schools (a percentage below 60), could reasonably be attributed to the prevalence of epidemic sickness in the district. Towards the end of the year the epidemic of scarlet fever in the borough centred around one school in North Watford more than in other parts of the borough, and cases of diphtheria occurred in two other schools. The half-term holiday was made a special occasion for cleaning and disinfection with regard to the school which was affected with scarlet fever. When a school is visited by infectious disease, considerable anxiety is caused both to parents and teachers. The former are inclined to think that the school is to blame for the outbreak of infection, and do not hesitate to express the opinion that their child has “caught” the infection at school. The fact is, however, overlooked that there are many other places where children meet in addition to school, especially in an urban district, and that infection is just as liable to be contracted on account of some other point of contact either with a carrier or a sufferer from the disease. Thus it is very often contracted in the home, by playing in the street, or in connection with various social organizations, such as Boy Scouts and at Sunday School. The

day school usually gets the blame, and parents still cling to the idea that school closure will cause the termination of an outbreak of infectious disease. Experience of school closure in urban districts has proved that this is not the case, although in rural districts where children meet very little apart from the school, school closure is useful in some cases.

In connection with an outbreak of infectious disease in an urban district it is usually sufficient to exclude all sufferers from the disease in addition to all known "contacts", although in the cases of measles, chicken pox and whooping cough, "contacts" need not be excluded if they are known to have had the disease.

Another question which sometimes agitates the parental mind, and which may be communicated also to the teacher, is that of school disinfection. It should be stated that very little, if any, infection can be derived from school premises in themselves. The modern view is that infection is mainly *personal*, being conveyed to the healthy either by direct contact with the sick or by means of intermediate hosts styled "carriers". At the same time, however, it may be worth while to "disinfect" school books and wooden surfaces, such as desks and floors. There is no doubt that the best disinfectant for school premises is abundant flushing with fresh air, and the liberal application of soap and water. Preferably a good carbolic soap should be used. Sometimes to complete the process the walls are sprayed with formalin solution, although this is not really necessary. Expressed briefly, the main essentials of school disinfection are abundance of fresh air and also soap and water.

It is impossible to speak in too high terms of the work of the Beechen Grove Special School, which has been continued much on the usual lines during the past year. A fresh development has been the formation of a football team, which is having a good effect on the health and morale of the boys. It may be desirable in summer to extend this departure into the realm of sport and to include cricket in the curriculum of the school, although at this season the cultivation of the school garden absorbs the energies of the children.

There is no doubt that open air occupation is the best training for the mentally defective child, especially in the development of power for manual work as this increases the usefulness of the child in after life more than laborious and often ineffectual efforts to instil a knowledge of the three r's.

It should be stated that the work of the Special School is

being appreciated more and more each year, as its objects become understood. The more intelligent of the parents realize that the best is being done for the child. at the Special School, although there are many who resent the certification of a child as mentally defective and still more its consignment to an institution which they regard as akin to a mental hospital. They should, however, judge the school by its results and be prepared to give the defective child its best chance, which often lies in the direction of attendance at the Special School.

Dr. Buchanan (Watford).

When the schools closed in December, five children were absent owing to ringworm.

The teachers report that the general cleanliness of the children is progressive. At medical inspection I notice that the children wear sound shoes, their clothes are clean and neat, and their appearance suggests systematic bathing. There is no doubt that the consciousness of being decently dressed imparts a feeling of self-respect, and is an important factor in personal hygiene.

In some of the schools a verminous child is now rare ; in others the same children are detected every time heads are examined, due no doubt to home conditions. On the whole the high standard of last year has been maintained.

There is from the teachers an urgent request that the question of providing playing fields for organized games and athletic sports may receive the attention of the authorities. The present playgrounds, even to the modern schools, are inadequate ; recreation grounds are few and usually overcrowded. Great credit is due to those teachers who have shown considerable ingenuity in their endeavour to gain for their pupils healthy out-door exercise. The boys of Victoria School receive training in cricket in the limited space of the school yard daily from 12 to 12.30. The Head Master, who is a member of the National Playing Fields Association, has drawn up a scheme by which four teams of ten each are coached at the same time in the different departments of cricket. Permission has been obtained for the boys to play football in Cassiobury Park during the winter season, and permission has been given by the Head Master of the Grammar School to use the cricket ground on certain days in the summer ; but both of these places are at a considerable distance from Victoria School. The Head Master says that the boys are very keen and that the ground problem is the only difficulty. The Head Mistress of Callow Land Girls'

School takes her girls to the boys playing yard for an occasional game of net-ball. The Head Mistress of St. Andrew's School takes her girls to a small recreation ground near the river, but it is far from the school, and too crowded for games. Senior children from all schools (except one which is too far from the river swimming baths) take swimming lessons in the summer and enter for competitions. For the juniors there is no playground but the streets. In Public Schools it is recognized that organized play is an important part of education, and is a necessity for the healthy development of the body. It is the chief aim of School Medical Service that children should leave school mentally and physically sound; to leave out open-air games from their training is to equip them only in part. If the authorities were disposed to consider this matter favourably, it would be well to act promptly, for towns are developing rapidly, and the ground in all directions is being taken up for building purposes. To obtain full value from a playing ground it is essential that it should be as near the school as possible.

Dr. Wigfield (Puckeridge).

The year covered by this report, being the first during which I have had the responsibility of examining the children attending the 22 schools within my area, finds me with the disadvantage of not having acquired a standard of comparison such as enables my colleagues in other parts of the county to assert that there has been improvement or otherwise in relation to the health, cleanliness and progress of the children who have been under consideration. Under these circumstances one can only state facts and record impressions.

The facts are that during the year 603 children have been inspected, and in 239 cases it was found necessary to give directions for the treatment of defects:—mainly tonsils and adenoids, errors of refraction, and carious teeth. This is a percentage of nearly 40, and would have seemed excessive but for the knowledge that in the previous year the report for the county shows 49 per cent. of similar defectives.

With regard to the eye cases, probably a third of the "defect" forms issued were not for new cases but to enable children who had previously had their error corrected to make the second visit to the ophthalmic centre that is so necessary for adjustment or confirmation of the correction prescribed on the first occasion.

With regard to the large number of tonsil cases (157) many of these belonged to the 7-9 and 10-12 age-groups, and were a repetition of efforts made by my predecessor to get parents

to avail themselves of the means at their disposal for remedying really very obvious defects in their boys and girls.

As to my impressions of the care and home-conditions of the children inspected, on the whole they are satisfactory.

Most of the children seemed to be reasonably clothed, adequately nourished and quite clean, though here and there in most schools, the exceptions were present to emphasize the rule. Among the unfortunate ones it is not difficult to differentiate between poverty and neglect: where the condition is attributable to poverty, the children may be very shabby but they are clean.

Cases of vermin were very infrequent, though in one family it was necessary to resort to exclusion on two occasions.

During the year epidemic disease has been troublesome; six schools have had their attendances seriously affected, measles, chicken-pox and mumps each accounting for two. Whooping cough very nearly did so in another case, while just at the end of the year one school had to be closed on account of diphtheria, and another has had the period of closure for the Christmas extended on account of scarlet fever.

In concluding, I should like to record my impression of the dangerously unprotected state of my area in relation to small pox; the vaccination rate appears to be declining despite the outbreak which occurred in the county during the early weeks of the year.

I should also like to say how cordially I welcome the Dental development at Buntingford. Similar arrangements would be welcomed with equal heartiness in other parts of my area.

Dr. McClymont (Cheshunt).

The prevalence of zymotic diseases has been the chief medical feature in connection with the school children in Cheshunt during 1928. Fifty cases of scarlet fever were reported during the year—the greatest number at least in my ten years of office—all except seven occurring in school children. The disease was in most cases of such a mild type that there was in many cases little invalidism and several children continued in attendance at school during the first day or more of the attack. St. Mary's and Turnford schools were mostly affected. Frequent examinations of the children were made by the nurses and myself. I found two girls desquamating in the former school they were isolated, and the epidemic ceased. There was also, an outbreak of measles affecting all the schools, and 199 first cases were notified. There were also 20 cases of diphtheria;

this disease is largely imported now from Enfield to which town many Goffs Oak children go to school.

During the routine school examinations, 788 children were inspected, and 113 defects were discovered. The cleanliness and health of the children was generally very satisfactory, and the school premises, lavatories and sanitary arrangements in good order with the exception of one school, to which attention has been specially directed.

Dr. Balance (Hatfield).

The school inspections have, on the whole, revealed a very satisfactory state of affairs. With few exceptions the children were clean, well-clothed, and of a good standard of intelligence.

In almost every case parents were willing and anxious to take advantage of the facilities for medical treatment offered by the school clinics, though the attendance of parents at the inspections was poor.

I should like to suggest the efficiency of school inspections would be considerably increased if the district nurse were present. This was the case at most schools, but at one or two she was not there.

The defects were all of the ordinary kinds and were in a normal proportion to the children examined.

I should like to thank headmasters and headmistresses for their help during inspections, and their interest in the medical condition of the children under their care.

Dr. Gross (Hemel Hempstead).

This being the first year of my acquaintance with this district, I am unable to make comparison with conditions obtaining in previous years. I would, however, say that I have been struck with the high standard of cleanliness obtaining generally throughout this district. It is well above the standard which I have found in other parts of the country in which I have worked.

The clothing of the children is also on the whole good, although attention has had occasionally to be drawn to inadequate footwear. A fair number of children, especially those in the entrant group, have been found to be too heavily clad. The nutrition of children varies. Very few actual cases of malnutrition have been determined, but there is a large number of children who do not attain the desired standard of nutrition.

A large number of cases of enlarged tonsils and adenoids

or of unhealthy tonsils have been found. It has been considered that these conditions in some cases have been largely brought about by septic teeth and any decision as to the operative treatment has been deferred pending dental attention in order to see whether improvement occurs as a result.

I find that advice given directly by myself or through the school nurse as to the remedying of defects is generally attended to by the parents. In many instances nurses are most enthusiastic in the following up of cases, and the arranging for any necessary treatment ; certain nurses undertake to accompany children from villages to the nearest dental clinic, having first arranged for means of transit. The only subject upon which advice does not seem to be acceptable to parents is that of vaccination.

There has been much infectious disease in this district during the year. Measles was very prevalent in May and June, and scarlet-fever was prevalent at Tring and Berkhamstead during the autumn months. A number of schools were visited during the year to investigate the spread of infectious disease, and if possible to prevent it.

A number of other visits have been made to the schools in order to see children returning after absence which has given rise to suspicion of infectious disease. Such children have not been allowed to return to school until seen by me unless they have a doctor's certificate of freedom from infection.

In regard to the Tring outbreak it seems to me that scarlet fever spread as easily in the Summer Vacation as in Term-time.

I think the spread of infectious disease is largely attributable to neglect in calling in a doctor at the commencement of children's illnesses. Many mild cases are allowed to progress without any precautions as to prevention of spread being taken : often because a doctor has not been called in the disease is not recognized. Even the doctor finds it difficult at a later stage. I have found two children in school in the desquamating stage, and another at its home, and, in addition, a number of children in school with a tonsilitis which has been ignored at home as far as medical attention is concerned.

Wherever such epidemics in a school have threatened, I have advised teachers to question children daily as to their health ; to inquire specifically for sore throat and to exclude any suspicious children, not allowing their return until satisfied through me or a doctor's certificate of their freedom from infection. I have also had distributed pamphlets, a copy of which I enclose.

There is, I think, some lack of appreciation of the importance of sending home at once unwell children and of excluding suspicious cases until satisfied of their freedom from infection.

Dr. Grattan (Welwyn Garden City).

As regards the schools in Welwyn Garden City, there has been no serious outbreak of epidemic disease with the exception of four cases of diphtheria which occurred two in children attending Pear Tree School, and two in children attending Handside School, Infants Department, although a search was made for "carriers" in both schools, none were detected; two, however, were found in one family, where a case had been notified.

The procedure followed in the case of a school child is to examine and swab the immediate contacts and to examine the whole class and take the name and address of any child who has an abnormal throat or nose in the class. They can then be swabbed or not, as circumstances demand. Although 17 cases of scarlet fever were notified during the year, only one occurred among the pupils of Pear Tree School, and two in Handside School. Of the remaining 14 cases of scarlet fever the patients were either adults or were too young to attend any school or attended private schools in or outside the district. Measles was prevalent in the late spring, also chicken pox and whooping cough. As considerable difficulty was experienced in obtaining accurate information in respect of the incidence of these infectious diseases which are not usually notified, I asked the Council to take the necessary steps to make them notifiable. Chicken pox has been made a notifiable disease in the Garden City for one year; the Ministry of Health, however, declined to grant the necessary sanction in the case of measles and whooping cough.

The floors of the schools are painted over with an oily substance "Dusterine" which appears to be most successful in preventing nuisance from dust. This method is reported on very favourably by several teachers and is very popular with the caretaker as it is easily applied. A substance known as Dusmo is used in one school (sawdust impregnated with an oily substance). It appears to be efficient, but requires more time and labour as the desks, etc., have to be moved.

Dr. Harvey (Bushey).

The health of the school children was generally satisfactory during 1928. Whooping cough was mildly prevalent during June, and July in Chorleywood. During the last quarter

of the year scarlet fever was prevalent in Watford Rural District and to a less extent in Bushey ; the disease was of a particularly mild type, and complications were rare.

No evidence was found of the predominance of any particular disease or group of diseases. In the case of the dental defects which were found, the teeth in rather a large percentage of cases showed too much decay for conservative treatment—a tooth should be treated at the first sign of decay for it can then be filled in a more satisfactory manner, and with much less pain.

The head teachers of the various schools have taken a great interest in the medical inspections and their assistance has been very valuable in the supervision of the health of the children, under their care. The health of a child has a direct influence on its education—an unfit child does not make a good scholar.

Dr. Hardy (Barnet).

The teachers and parents continue to take an active and helpful interest in the school inspections ; they look for and report defects especially eyes. As regards defects increases were noted in tonsils and adenoids, and heart disease. One interesting case of mirror writing was discovered. It has not been found necessary to close any of the schools, despite an outbreak of small pox. I have, as far as possible, adopted the memorandum on closure and exclusion from school as the routine practice throughout the districts. This has the great advantage of uniformity and is as accurate a basis as we have at present.

Cases of defects are well and promptly treated. The County Council bears all the cost of the treatment of tonsils and adenoids, and the increased allowance to hospitals is of great assistance. There are still no arrangements for dental treatment ; this is an urgent matter and constitutes a definite defect in the health service.

Two cases of small pox occurred in school children. The children were at school for two days with the rash out ; they were removed to the Isolation Hospital. The procedure adopted for checking the spread of the disease was as follows :— (1) All school contacts were immediately carefully examined ; (2) all contacts were vaccinated ; (3) vaccination was urged and extensively carried out in the other schools ; (4) the school was not closed, with the result that all children were kept under observation ; (5) all children “ absent sick ” were visited by the school nurse, and I myself visited all doubtful cases.

No further cases of small pox occurred and the non-closure of the school was, in my opinion, justified. I was able to keep in touch with all contacts and panic was avoided. I attended a meeting of the Managers and explained the procedure advised, and had their support during a difficult time.

Dr. Barker (Hadham).

The Schools were visited each term. Epidemics of measles and whooping cough have interfered with the attendance, but have apparently left very little in the way of serious complications. The standard of cleanliness is good; the obviously-uncared-for child being rarely seen.

There is only a small proportion of the parents who takes the trouble to attend the inspections, but this is probably because the school nurses do their duties so thoroughly, and the parents realize that they will be told of anything important.

Those cases which have had attention to eyesight, teeth and throats, definitely show the benefit they have received. There can be no doubt that early attention to such defects produces a very satisfactory return.

Dr. Hine (Harpenden).

In his report on the National Children Homes School, Dr. Hine states that the school was visited and inspected in November. The premises were found in good order, ventilation and sanitary arrangements satisfactory, and the class rooms clean and tidy. The entrants and the children of 8 and 12 years were examined on three mornings in October and November, and report cards of 68 children were forwarded to the County Medical Office, Hertford. One case of diphtheria was notified on 13th November, since which there has been no further infectious case.

CHAPTER III.—PHYSICAL RECORDS AND DEFECTS.

The number of children inspected during 1928 was 15,812, compared with 13,307 for the previous year; this includes 140 special inspections and one inspection of a pupil teacher. In addition, there were 225 re-inspections. The average number of children on the books was more than last year, being 41,700, compared with 41,255. The number of schools included in the scheme of inspection was 247, compared with 246 for 1927. There has been no change in the system adopted for recording the results of inspection.

TABLE IV.—Defects and Directions, 1928.

Sex.	District.	Total In- spections.	Defects for which directions were given.			
			Number of children requir- ing Directions.	Percentage.	Number of Directions given.	Percentage.
Boys	Urban . . .	5476	1637	29·9	2197	40·1
	Rural . . .	2408	960	39·8	1450	60·2
	Urban and Rural .	7884	2597	32·9	3647	46·2
Girls	Urban . . .	5563	1749	31·4	2405	43·2
	Rural . . .	2365	945	39·9	1390	58·8
	Urban and Rural .	7928	2694	34·0	3795	47·9
Boys and Girls	Urban . . .	11039	3386	30·7	4602	41·7
	Rural . . .	4773	1905	39·9	2840	59·5
	Urban and Rural .	15812	*5291	33·5	*7442	47·1

* The difference between the two totals is due to more than one direction being given in the case of certain children.

Table IV gives particulars of the inspections in relation to district and sex, and of the percentages of defects and directions given. Of the total number of children examined, defects

TABLE V.—Return of Defects found in the course of the Medical Inspection of 15,812 children in 1928.

Defect or Disease.		Boys.		Girls.		Total.		Percentage.	
		Number referred for Treatment.	Number requiring to be kept under Observation.	Number referred for Treatment.	Number requiring to be kept under Observation.	Total number referred for Treatment.	Total number requiring to be kept under Observation.	Percentage referred for Treatment.	Percentage requiring to be kept under Observation.
Skin	Malnutrition	86	415	51	395	137	810	.9	5.1
	Uncleanliness—								
	Head	29	56	163	190	192	246	1.2	1.5
	Body	59	151	60	124	119	275	.7	1.7
	Ringworm—								
	Head	—	—	2	1	2	1	.01	.01
	Body	—	1	1	3	1	4	.01	.02
	Scabies	8	1	2	2	10	3	.06	.02
	Impetigo	16	25	9	14	25	39	.1	.2
	Other Diseases	19	15	15	17	34	32	.2	.2
Eye	Blepharitis	34	24	48	32	82	56	.5	.3
	Conjunctivitis	3	4	8	8	11	12	.07	.07
	Keratitis	—	—	—	—	—	—	—	—
	Corneal Opacities	1	1	—	2	1	3	.01	.02
	Defective Vision	305	279	328	314	633	593	4.0	3.7
Ear	Squint	68	37	88	45	156	82	1.0	.5
	Other Conditions	3	7	3	8	6	15	.04	.09
	Defective Hearing	25	45	20	46	45	91	.3	.6
	Otitis Media	9	18	12	18	21	36	.1	.2
Nose and Throat	Other Ear Diseases	17	13	17	11	34	24	.2	.1
	Enlarged Tonsils	615	975	680	975	1295	1950	8.2	12.3
	Adenoids	56	73	46	56	102	129	.6	.8
	Enlarged Tonsils and Adenoids	307	127	338	169	645	296	4.1	1.9
Enlarged Cervical Glands (non-tuberculous)	Other Conditions	—	—	—	—	—	—	—	—
	Defective Speech	9	46	4	23	13	69	.08	.4
	Teeth—Dental Diseases	1593	1471	1619	1471	3212	2942	20.3	18.6
	Heart and circulation—								
Lungs	Heart Disease	7	35	9	31	16	66	.1	.4
	Organic	31	101	26	83	57	184	.4	1.2
	Functional	19	44	16	42	35	86	.2	.5
	Anæmia	2	12	2	21	4	33	.02	.2
Tuberculosis	Bronchitis	38	51	35	28	73	79	.5	.5
	Other Non-Tuberculous Diseases								
	Pulmonary—								
	Definite	4	7	1	—	5	7	.03	.04
	Suspected	1	1	3	2	4	3	.02	.02
	Non-pulmonary—								
	Glands	4	5	2	—	6	5	.04	.03
	Spine	—	2	1	—	1	2	.01	.01
	Hip	—	1	—	1	—	2	—	.01
	Other Bones and Joints	—	1	—	—	—	1	—	.01
Nervous System	Skin	—	—	—	—	—	—	—	—
	Other Forms	—	2	1	—	1	2	.01	.01
	Epilepsy	1	2	—	7	1	9	.01	.06
	Chorea	—	—	3	1	3	1	.02	.01
Rickets	Other Conditions	8	5	12	7	20	12	.1	.07
	Defects	10	45	4	17	14	62	.09	.4
	Deformities	73	70	55	65	128	135	.8	.8
	Thyroid Glands	2	4	20	23	22	27	.1	.2
Other Defects and Diseases	Other Defects and Diseases	61	58	44	64	105	122	.7	.8

for which directions were given were found in 5,291, compared with 4,671, or 33.5 per cent., as against 35.1. The number of directions given with a view to the treatment or correction of minor ailments and defects was 7,442, compared with 6,627 last year.

Table V gives particulars of the various defects found in the course of the medical inspection of 15,812 children and of the numbers referred for treatment and requiring to be kept under observation. The defects for which treatment was most frequently required were dental disease, 20.3 per cent. compared with 21.6 per cent. last year; defective vision, 4.0 per cent. compared with 3.9 last year; enlarged tonsils, 8.2 compared with 8.0 last year, non-tuberculous cervical glands, 3.1 per cent. compared with 5.2 per cent.; and enlarged tonsils and adenoids, 4.1 per cent. compared with 3.8 per cent. last year.

Closure of Schools.—Schools were closed on 35 occasions during 1928, compared with 88 occasions during 1927. The chief causes of school closure during 1928 were measles 14, compared with 18 occasions last year; whooping cough 5 compared with 8; influenza 1 occasion; diphtheria 7 occasions; and mumps 3 occasions.

In the memorandum referred to in last year's report, the Board of Education emphasizes the fact that "if during epidemics of infectious disease, the power to exclude individual children from school be used to the best advantage, it is only in special and quite exceptional circumstances that it will be necessary to close a school in the interests of public health." It is further pointed out that as a general rule and apart from exceptional circumstances, closure of the school is not justified unless all the following conditions are simultaneously present (a) evidence pointing to the continued meeting of children in school as a source of infection; (b) cases of infectious disease continuing to occur after every effort has been made to discover the infecting cause, and (c) good reason to expect that closure will considerably reduce the likelihood of exposure to infection.

With reference to certain infectious diseases, such as measles and whooping cough, the memorandum points out that while school attendance may be greatly lowered during the prevalence of such diseases, a large proportion of children have already contracted the disease or been exposed to infection and school closure will therefore do little to prevent further spread of the disease. The Code now provides that if the average attendance of a school is below a certain percentage of the number on the books owing to the prevalence of epidemic disease in the district, and if the school remains open the attendances

need not be counted for the purpose of reckoning the average attendance on which the grant is paid.

With reference to the question of school closure, it is necessary to state that pressure is sometimes applied to School Medical Officers to close a school when the attendance is below a certain percentage, but it is necessary to emphasize as mentioned above that a school should only be closed when such procedure is regarded as necessary in the interest of public health. Occasionally, however, exceptional circumstances may arise which necessitate immediate closure as has occurred in the present epidemic of influenza, when the staff in certain schools has been seriously depleted.

TABLE VI.—Closure of Schools during 1928.

	REASONS FOR CLOSURE.								Total number of Closures for all reasons.
	Measles.	Scarlet Fever.	Whooping-cough.	Diphtheria.	Chicken-pox.	Influenza.	Mumps.	Other Causes.	
No. of Closures—									
Urban	5	—	—	1	—	—	—	2	8
Rural	8*	1	5	3†	1	1	3¶	—	22
No. of Re-closures—									
Urban	1	—	—	—	—	—	—	—	1
Rural	—	—	—	3	1	—	—	—	4
Total : Urban . .	6	—	—	1	—	—	—	2	9
Rural	8	1	5	6	2	1	3	—	26
All in 1928 . . .	14	1	5	7	2	1	3	2	35

* Includes 1 Measles and Mumps.

† „ 1 Diphtheria and Scarlet Fever.

¶ „ 1 Mumps and Scarlet Fever.

Prevention of Infectious Disease.—The action to be taken in controlling and preventing the spread of infectious disease in public elementary schools is now fairly well recognized and

several of the School Medical Officers in their reports refer to the steps which they have taken and also to various difficulties which they have experienced in connection therewith. The view that immediate closure should be applied when infectious disease appears in a school is still held in some districts by correspondents and teachers, but it is obvious that in urban districts especially closure will not prevent the children of school age from coming in contact with each other while if the school is open the child will be under efficient care and observation. A striking example of the advantages which may result from keeping a school open even in the presence of small pox is referred to by Dr. Hardie, of Barnet, in his report. The question of closure was very carefully considered in this case, but it was decided that by keeping the school open the children could be kept under better supervision and observation, so that the risk of missed cases occurring would be greatly lessened and the control of the outbreak would be more speedily secured, and the result fully justified this view. The procedure adopted in this school to prevent the further spread of the disease is referred to elsewhere.

The routine measures to be adopted in the prevention of infectious disease in schools are defined and discussed as follows :—

(1) Exclusion of suspected cases—any child who presents symptoms suggestive of any of the common infectious diseases or who appears to be or complains of being ill should immediately be excluded ; (2) the immediate contacts of any case of infectious disease should be excluded except in the case of certain disease of which the contact has previously had an attack. Teachers and parents should be encouraged to exclude all contacts and suspects. (3) The examination of the children of a class in which a case of infectious disease has occurred. In the case of diphtheria the nose and throat of doubtful cases should be swabbed. (4) Disinfection and cleaning which includes the disinfections of books, pencils, pens, etc., and washing floors and woodwork with water containing some antiseptic. (5) Ventilation and suppression of dust ; both are of special importance during the winter months.

Malnutrition.—The number of children in which some degree of malnutrition or impaired nutrition was found was 947, compared with 792 for 1927. Of the total number of children examined, in 0·9 per cent. malnutrition was sufficiently marked to necessitate the child being referred for treatment, compared with 1·3 last year, while in 5·1 per cent. there was a slight degree

of malnutrition which necessitated the children being kept under observation, compared with 4·6 last year. The general inference to be drawn from these figures is that while there is some increase in the number of children with slight manifestations of malnutrition there is a definite decrease in the number of children with evidence of malnutrition of such a degree as to call for treatment.

Cleanliness.—Of the total number of children examined 438 were referred for treatment or to be kept under observation for uncleanliness of the head, as compared with 309 for 1927. Of the total number of children examined, 1·2 per cent. were referred for treatment for this condition, compared with 1·3 last year. The number of children with uncleanliness of the body was 394, compared with 289 for 1927, an increase, while the percentage referred for treatment was 0·7 compared with 1·0 last year. These figures indicate a further improvement generally in the cleanliness of school children.

Scabies and Ringworm.—Thirteen cases of scabies have been reported during the year, compared with 11 last year, and of the number reported 10 were referred for treatment and three to be kept under observation. Eight cases of ringworm of the head and body were reported during the year, compared with seven last year. The percentage of children referred for treatment with ringworm of the head was 0·01 compared with 0·04 last year.

Defective Vision and Squint.—Some visual defect was found in 1226 of the children examined, compared with 897 during 1927. Of the total number of children examined 633, or 4·0 per cent., were referred for treatment, compared with 3·9 last year. The number of children with squint referred for treatment was 156, compared with 120, and the number of children with eye disease referred for treatment was 100, compared with 67.

Teeth.—Of the children examined, 6,154, or 38·9 per cent., were found to have some dental defect, compared with 4,999, or 37·6 per cent. last year. Of the total number of children examined 20·3 per cent. were referred for treatment, compared with 21·6 last year. During the year arrangements have been made to provide facilities for dental treatment in certain of the districts in which up to the present no such provision has been made.

Tuberculosis.—Twelve cases of definite pulmonary tuberculosis were recorded out of the total number of cases examined

compared with 11 last year. Twenty cases of non-pulmonary tuberculosis were recorded amongst the children examined, compared with 16 last year.

Adenoids and Enlarged Tonsils.—Some enlargement of the tonsils was found in 3,245 cases, compared with 2,674 cases in 1927. For this condition 8·2 per cent. of the children examined were referred for treatment, compared with 8·0 last year. With regard to adenoids, 231 cases were reported, compared with 298 last year, while 0·6 per cent. were referred for treatment, compared with 1·3 last year. There were 741 cases of tonsils and adenoids occurring together, while 4·1 per cent. of the children examined were recommended treatment for this condition, compared with 3·8 last year.

Enlarged Glands.—Some enlargement of the cervical or submaxillary glands was found in 1,661, compared with 1,707 last year. The cause of the enlargement of these glands is usually septic absorption from carious teeth, enlarged tonsils, or disease of the skin or scalp. The enlargement, which is the result of an adenitis, will usually yield to energetic treatment of the active cause. Such enlarged glands may, however, be invaded by tubercle bacilli, and eventually become tuberculous.

Non - Tuberculous Respiratory Diseases.—Thirty-seven children were found to have bronchitis, compared with 14 last year, and 152 were recorded as suffering from other respiratory conditions, compared with 112 last year. This shows a slight increase which may be regarded as the result of the cold and wet summer.

Physically Defective Children.—During the year 136 children were recorded as suffering from defective hearing, compared with 128 last year, the percentage referred for treatment for this condition being 0·3. The number of children suffering from defective speech was 82, compared with 79 last year, and the percentage referred for treatment for this condition was 0·08, compared with 0·2 last year. The presence of deformities is reported in 263, the percentage referred for treatment being 0·8, compared with 0·7 last year.

Nervous Diseases.—Ten cases of epilepsy were reported, compared with three last year. There were four cases of slight chorea, the same as last year. Severe cases of chorea should always be regarded with suspicion, as encephalitis lethargica

may present symptoms very similar to this condition. Other nervous conditions were found in 32 children, compared with 36 last year.

Enlarged Thyroid.—Some enlargement of the thyroid was found in 49 children. In 22 of the 49 cases treatment was recommended. The number of cases of enlargement in the three age-groups was as follows :—5–6 years, 1 boy and 6 girls, 7–9 years, 1 boy and 7 girls ; 10–12 years, 4 boys and 30 girls.

Rickets.—This condition was found in 76 children, compared with 32 last year. Of these 14 were referred for treatment. The majority of the children with rickets are now referred for expert advice, and treatment to the orthopaedic clinics.

Other Defects and Minor Ailments.—Impetigo contagiosa, which is occasionally a cause of school closure, called for treatment in 0·1 per cent. of the children examined, compared with 0·2 per cent. last year. The percentage of cases of otitis media recommended for treatment was 0·1 and for other ear diseases 0·2. The percentage of children referred for treatment for anaemia was 0·2, compared with 0·3 last year. The number of children with evidence of cardiac disease, including both organic and functional conditions, was 323, of which 73 were referred for treatment, and 250 were kept under observation. The percentage referred for treatment for cardiac disease was 0·1 for organic disease and 0·4 for functional disorder.

Vaccination.—The percentage of school children who are unvaccinated continues to increase. Of 15,812 children examined 5,525 were vaccinated and 10,287 were unvaccinated, the percentage of vaccinated being 34·9, and the percentage not vaccinated being 65·1.

The importance of vaccination has been emphasized by the fact that during the year 34 cases of small pox were notified in the county, several of these being school children. The presence of small pox in any district at once raises the question of what steps should be taken in regard to the schools. The following steps are generally recommended : (1) Any child absent from school to be reported at once to the School Medical Officer ; (2) no child to be allowed to return to school after a few days' illness without being seen by a doctor ; (3) The School Nurse to make frequent visits to school to inspect children and to report any ailing or suspicious child ; (4) a vaccination register of the children to be kept giving age of child and number

and character of marks so that special attention may be given to unvaccinated children ; (5) efforts to be made to vaccinate all unvaccinated children ; (6) the question of school closure was considered, but it was decided that observation and supervision of the children are more efficiently carried out by keeping the schools open.

CHAPTER IV.—THE TREATMENT OF DEFECTS AND MINOR AILMENTS.

The work in connection with the treatment of defects and minor ailments has been continued during the year on similar lines to last year. Special arrangements have been made during the year to provide a scheme for increasing the facilities for dental treatment by the appointment of a second whole-time dentist and by the establishment of additional clinics.

Operative Treatment for Tonsils and Adenoids.—Operative treatment for these conditions is carried out in the hospitals in the county, for which a fee is paid to the operating surgeon, the anaesthetist, and the hospital authority. During the year 1,097 school children were operated upon under your Council's scheme for tonsils and adenoids, compared with 1,016 last year.

Correction of Defective Vision.—Children with defective vision are referred by the Assistant School Medical Officers to the ophthalmic surgeons in their respective districts. The number of children found to have some degree of defective vision was 1,226, and the number referred to ophthalmic surgeons was 899. The number of children supplied with glasses was 737, compared with 565 last year.

Dental Treatment : New Scheme for Additional Clinics.—The present arrangements for the provision of facilities for dental treatment are as follows :—(a) Eight County Council dental clinics in the following districts. Hertford, Hatfield, St. Albans, Watford, Stevenage, Hitchin, Letchworth, and Waltham Cross. (b) Five voluntary clinics at Welwyn, Harpenden, Welwyn Garden City, Hoddesdon and New Barnet. (c) Arrangements with dental surgeons to carry out treatment in the case of school children at Royston, Buntingford, Berkhamstead, Bishop's Stortford and Tring.

The new scheme for additional dental clinics which it is expected will be commenced during the present year will bring facilities for dental treatment within a distance of five miles

of all the schools in the county with one or two exceptions. The scheme provides for the appointment of a second whole-time dentist, and for the division of the county into two sections, with a dental surgeon in each. The scheme also provides for the establishment of new dental clinics or other facilities for treatment in the following districts :—Bishop's Stortford, Buntingford, Hoddesdon, High Barnet, New Barnet, Hemel Hempstead, King's Langley, Whitwell, Radlett, Rickmansworth, and Puckeridge.

It is desirable to define the aim of the County Council dental scheme as some misconception exists as to the means by which the final dental treatment and care of all the school children in the county can be secured. The aim of such a scheme is to provide for the examination and treatment of all school children belonging to the 6–8 age group that is children of 6, 7, and 8 years of age. The scheme must also provide for the annual re-examination and necessary treatment of all children in this group. By this means it is expected that all the children of school age within reasonable reach of the dental clinics will eventually be inspected and treated, so that when they leave school at the age of 14, they will have healthy teeth. It is not contended that children of all ages can at the outset be inspected and treated, as this would overcrowd the clinics and seriously interfere with the routine inspections and treatment of the children in the 6–8 age group and the subsequent inspection and treatment of these children. Overcrowded clinics must be avoided, as by concentrating on this special group with subsequent re-examination and treatment—the children of all ages will eventually be dealt with.

Treatment of Ringworm.—Arrangements for the X-ray treatment of ringworm have been made with the authorities of the Royal Free Hospital, Gray's Inn Road. During the year 13 cases of ringworm have been treated by this method, compared with 10 last year, and the results continue to be excellent.

Minor Ailments.—The number of defects treated at the two minor ailment clinics at Hitchin and Hatfield was 257, and the number treated as a result of following up by the school nurses was 1,831. Particulars of the various minor ailments and defects treated under this heading are given in the appendix at the end of the report. Of the total number of defects of all kinds treated in connection with clinics and school nursing 77 per cent. were successfully treated or still under treatment, compared with 80·4 last year.

Orthopaedic and Massage Treatment.—School Children suffering from various orthopaedic defects are referred by the Assistant School Medical Officers to the orthopaedic and massage clinics in the County for expert advice and treatment.

The British Red Cross have established in Hertfordshire 6 Orthopaedic Centres, 9 Massage Clinics, and 1 After-Care Centre.

The Massage Clinics are at Harpenden, Hatfield, Hitchin, Letchworth, St. Albans, Watford, Welwyn, and Welwyn Garden City and Hoddesdon. They are open, at least, 3 days in the week, and some of them 6 days. They are staffed by fully qualified masseuses, and are under the control of the County Supervisor.

A variety of forms of treatment is given, including Massage, Galvanism, Faradism, Radiant Heat, Remedial Exercises, and Re-Education.

The After-Care Centre at Hertford is open one day a fortnight, when it is visited by the County Supervisor. Exercises are given, splints are supervised and repaired, and plasters are made and renovated.

The Orthopaedic Centres are at St. Albans, Hitchin, Letchworth, Watford, Hertford, and Hoddesdon. They are visited at regular intervals by the Orthopaedic Surgeon, who there sees all the Infants and School Children who are sent for treatment by the Infant Welfare Doctors and the School Medical Officers. He also sees any cases sent for an opinion by their local Medical Practitioner.

Hospital in-patient treatment is carried out at the Royal National Orthopaedic Hospital and at the County Branch at Brockley Hill. This ensures a continuity of treatment as the Surgeon-in-Charge of the Orthopaedic Centre is on the Staff of both these hospitals. Among the operation cases are several which have been operated on in the out-patient Department of the Orthopaedic Hospital. This is made possible by the fact that the cases can be seen at regular intervals at the nearest Clinic or at their own homes, and can receive their subsequent treatment at the Clinic. A great economy is thereby effected as these cases would otherwise have to remain in hospital for several weeks, it being impossible to send them home directly after operation unless adequate skilled treatment is available. Another advantage of this procedure is that the usual long period of waiting for admission is avoided. The cases can usually be sent for operation within a month of the recommendation being made and thus save valuable time.

TABLE VII.—Giving particulars of various defects and morbid conditions dealt with at the Orthopædic Clinics and Centres during the year.

Structure.	Condition.	Under 5.	5 to 15.	Adults	Total
Bones & Joints (Congenital).	Deformity of upper limb .	—	—	—	—
	Deformity of lower limb .	51	12	2	65
	Deformity of head & trunk	10	4	1	15
Bones & Joints (Acquired).	Deformity of upper limb .	—	1	—	1
	Deformity of lower limb .	140	38	44	222
	Deformity of head & trunk	—	13	26	39
Bones . . .	Infections . . .	—	3	3	6
	Injuries & Fractures .	6	30	190	226
	New Growths . . .	—	4	3	7
	Amputations . . .	—	—	8	8
Joints . . .	Infections—Arthritis .	—	4	121	125
	Tuberculosis .	—	7	7	14
	Injuries . . .	3	10	123	136
Central Nervous System.	Infantile Paralysis . .	7	23	8	38
	Hemiplegia . . .	2	15	5	22
	Spastic Paralysis . . .	3	11	2	16
	Encephalitis Lethargica .	—	—	1	1
	Other Conditions . . .	1	1	11	13
Peripheral Nervous System.	Injuries to Nerves . .	1	3	18	22
	Neuritis & Sciatica . .	—	—	79	79
	Other Conditions . . .	—	1	19	20
Connective Tissues	Scars, fibrositis, etc. .	—	1	50	51
Muscles & Tendons		26	68	84	178
Constitutional .	Rickets	2	—	—	2
	Rheumatism	—	1	58	59
Vascular System .		—	—	17	17
Other Conditions		7	6	29	42
		259	256	909	1424

EXPLANATORY NOTES.

Acquired Deformities of Lower Limbs.

Includes all cases of knock knees and bow legs.

Muscles and Tendons.

Includes cases of postural kyphosis, scoliosis and early flat feet.

The only cases included under the heading “Rickets” are those having no definite deformity.

When a case of rickets has a definite deformity, this case is included under the special heading which refers to such deformity.

TABLE VIII.—Giving the number of patients sent to Hospital and attending Clinics during the year.

Number of Patients sent to Hospital.			Number of Patients attending Orthopædic Centres and Clinics.		
Under Five.	Five to Fifteen.	Over Fifteen.	Under Five.	Five to Fifteen.	Over Fifteen.
16	21	35	259	256	909

CHAPTER V.—SCHOOL NURSING.

The duties of the nurses in connection with the medical inspection of school children includes (*a*) visiting the school with the Assistant School Medical Officer for routine medical inspection, (*b*) visiting the schools for inspection as regards cleanliness of the children, (*c*) following up cases of defects and minor ailments with a view to the carrying out of suitable treatment, (*d*) assisting in the nursing treatment of minor ailments, (*e*) attending dental or other clinics providing treatment for school children.

The visits of the nurses to the schools for inspections as to personal cleanliness average for the year the same as last year, namely, 15. The beneficial results of these visits to the school by the nurse is indicated by the fact that the number of individual children found verminous was 397, compared with 325 for the previous year. The total number of examinations and re-examinations of children made in the schools by the school nurses, for cleanliness and minor ailments was 343,462 compared with 235,146 last year, and the number of children cleaned and re-cleaned was 2,636.

A further valuable department of the work of the School Nurse is the following up of various minor ailments and defects, so as to secure suitable and successful treatment. In this direction the nurse does excellent work, the value of which cannot be correctly demonstrated by mere figures and statistics. Reference to the following table, however, will show that throughout the county 77 per cent. of the defects reported upon were treated satisfactorily or were in receipt of medical advice. The percentage for Watford, namely 84·5 is excellent, but it is below the high figure for last year.

The following table which has been prepared for me by Miss Harrington, the County Health Visitor, and County Superintendent of Nurses, gives particulars of the excellent work carried out by the nurses during the year :—

Work of School Nurses during 1928.

	Returns from Nurses employed by Local Nursing Associations undertaking School Nursing.	Returns from County Council School Nurses.	Watford (Mrs. Stokes).	Grand Total of all School Nursing and Clinic Work.
Number of Schools ...	207	28	12	247
Number of Children ...	29,118	6,258	6,324	41,700
Medical Inspections and Clinics attended ...	1,106	512	271	1,889
Number of other Visits to Schools	3,117	469	285	3,871
Number of Examinations and Re-examinations for cleanliness and minor ailments	180,773	38,583	24,106	243,462
Number of Individual Chil- dren found verminous	334	38	25	397
Number of Individual Children found unclean	1,152	295	352	1,799
Number cleaned and re- cleaned	2,184	269	183	2,636
Number of visits to Parents re defects and un- cleanliness	9,548	2,307	1,131	12,986
Total number of Defects reported on	6,109	1710	1,951	9,770
Number treated satis- factorily and number re- ceiving medical advice	4,698	1,176	1,649	7,523
Percentage treated satis- factorily and receiving medical advice	76·9	68·8	84·5	77·0

CHAPTER VI.—THE PHYSICALLY AND MENTALLY ABNORMAL CHILD.

Particulars are obtained from the Assistant School Medical Officers, the school nurses, and the school attendance officers from time to time regarding abnormal children who have come under their observation. In addition during the present year information has been received from the teachers regarding the presence in the schools of mentally subnormal children. This information is given in a special report regarding each child on a special form.

The Mentally Defective Child.—During the year 64 children were examined as to their mental condition. Of this number 34 were recommended for admission to a special school, and 5 were referred as ineducable to the Committee under the Mental Deficiency Act. At the present time there are 118 children attending certified schools for mentally defective children. Further particulars of the instruction given to mentally defective children will be found in the Annual Report of the Kingsmead Residential School.

Report of Beechen Grove Special Day School, Watford.—Miss Schulze, the head teacher, reports as follows:—The work of the Special School has continued on much the same lines as last year; the number of children on the register on 31st December, 1928, was 44, of which 29 were boys and 15 were girls. During the year, further successes have to be reported. One boy is doing well at engineering, and a letter was received from the Manager of the works where he is employed stating how pleased he was with the work of the Special School, since then further good reports of this boy's work has been received.

In February a social reunion of past and present scholars and parents was held, which was a great success. In March a group of boys from a neighbouring school visited the School to hear a lecture and demonstration on musical appreciation; these visits have been repeated. Compositions were written after the lectures.

During January two boys passed with honours a Trinity College of Music examination in pianoforte playing.

In May a football team was formed and trained by Miss K. Schulze. The boys have met several schools in friendly matches and have won several games. Dr. Cox has witnessed some of the games, and has helped greatly in every direction. The Watford Football Club rigged the boys out in their own colours.

and Alderman Thorpe has kindly given football boots and stockings, while the L.M.S. Ambulance Corps has bought under shirts for the team.

Fifteen children were taken to the Zoological Gardens by Miss K. Schulze. The children spent a profitable and enjoyable day, and afterwards wrote their impressions of their visit.

In July an exhibition and sale of the children's work was held at the Cassiobury Park Flower Show for two days. In November two further musical successes were gained by a girl and a boy in pianoforte playing; no tuition had been given beyond that given in the School.

During the year the choir children were invited by the B.B.C. to broadcast songs and pianoforte solos from 2LO. This they did on 30th November, many letters were received congratulating the children. Mr. H. Kingham, J.P. kindly lent a portable wireless set to the School in order that the remainder of the School might listen in to their school-fellows. The School garden has been a great success.

The above report from Miss Schulze bears evidence to the good work which is being carried out in the Beechen Grove Special School, and to the good results obtained by the special teaching and instruction which are given in the School. An expression of thanks is due to those kind friends of the School who have done so much during the year to provide recreation for the children and in other ways to assist in what is a very valuable and special form of educational work.

The Dull and Backward Child.—During the year reports were received of 25 children of this type. Steps have been taken to make special provision for the instruction of dull and backward children in Watford.

The Blind Child.—Interference with instruction in a public elementary school may arise from complete or partial blindness. During the year particulars were received of 3 blind or partially blind children and these were recommended for admission to special schools. At the present time 13 blind children are attending certified schools or classes for the blind.

The Deaf Child.—During the year particulars were received of deaf or partially deaf children and these were recommended for admission to special schools. At the present time there are 25 totally deaf or deaf and dumb children in certified schools for the deaf.

The Epileptic Child.—The education of the epileptic child is not infrequently complicated by the presence of some degree of mental deficiency. During the year particulars were received of 3 epileptic children. At the present time no epileptic children are in special schools for epileptics.

Physically Defective Children.—These are children who are crippled or who suffer from some physical defect. Particulars of the work carried out in connection with the treatment of physically defective children are given in the section dealing with orthopaedic treatment.

Schools for Blind and Deaf Children.

Barclay Home and School for Blind Girls, Wellington Road, Brighton.
 Brighton Asylum for the Blind (Male Children), Eastern Road, Brighton.
 Brighton Institution for the Instruction of Deaf and Dumb Children, 136 Eastern Road, Brighton.
 North Staffs. Joint Councils' Residential Blind Council School, Penkhull, Staffordshire.
 North Staffs. Joint Councils' Residential Deaf Council School, Penkhull, Staffordshire.
 Kingsdown (Bristol) Council Deaf School, 10 Kingsdown Parade, Bristol.
 Royal Institution for Deaf and Dumb, Friargate, Derby.
 East London Home and School for Blind, Warwick Road, Upper Clapton, N.E.
 Hastings and St. Leonards School for Blind Mentally Defective Children, 48 and 49 Kenilworth Road, Hastings.

Schools for Defective and Epileptic Children.

Sandwell Hall Institution for the permanent care of the Mentally Defective, West Bromwich, Staffordshire.
 Field Heath House School (Roman Catholic), Hillingdon, Essex.
 Littleton House Special School, Uxbridge, Middlesex.
 Knotty Ash Horticultural Special School, Liverpool.
 St. Vincent's Roman Catholic Home for Physically Defective Boys, Eastcote, Pinner, Middlesex.
 The Christian Social Service Union School, Lingfield, Surrey.
 St. Elizabeth's Epileptic School (Roman Catholic), Much Hadham, Herts.
 Chalfont St. Peter Colony for Epileptics, Chalfont St. Peter, Bucks.
 Besford Court House, Worcestershire,
 Heritage Schools of Arts and Crafts for Cripples, Chailey, Sussex.
 Pontville for Feeble-minded Roman Catholics, Ormskirk.
 Hillside House R.C., Buntingford.

CHAPTER VII.—REPORT OF THE MANAGERS OF THE HERTFORD KINGSMEAD SPECIAL RESIDENTIAL SCHOOL

RELATING TO THE YEAR ENDED 31ST DECEMBER, 1928.

1. The Managers are pleased to be able to report a year of steady progress. The numbers in residence on the 31st December, 1928, were: Hertfordshire children 46 boys and 28 girls, total 74; out-county children 16 boys and 16 girls, total 32, making a total number of 106 children under 16 years of age. In addition there were 10 feeble-minded young women in residence, making a grand total of 116 in residence.

There have been no serious outbreaks of infectious or other diseases and the health of the children has been good. The Managers carefully consider the reports of the School Medical Officer once a year upon each individual child and they are confirmed in their view that when children are admitted at about 7 or 8 years of age, the best results are obtained. They therefore attach great importance to the early admission of children to the school. Unfortunately, even after children have been for several years in the school, a certain number of them require institutional treatment of some sort and there will always be a certain proportion for whom an institution provided under the Mental Deficiency Act, 1913, is the only suitable one. The Managers have in their annual reports from time to time drawn the attention of the County Council to the urgent need of the provision of such an institution in the county and they are glad to think that there is now some prospect of this institution being provided and they desire once more to emphasize the importance they attach to the building being proceeded with as soon as possible.

The Managers submit with this report, reports from officials' dealing with their respective departments which they consider satisfactory. With regard to financial conditions, the net expenditure out of the county rates for the financial year ended 31st March, 1928, is £2,988 2s. 9d. The net cost per head falling upon the county rates is £24 1s. 11d. excluding staff and £21 9s. 11d. including staff. For the year ended 31st March, 1927, the net cost per head on the county rates was £22 17s. 3d. excluding staff and £20 6s. 1d. including staff. The increased cost is due to the fact that the average number in residence during the year was slightly less than last year, and the fact that there were a few less out-county children at the school.

W. GRAVESON,
Chairman.

School Medical Officer's Report.

2. During the year the health of the children has been good, and with one or two exceptions their nutrition has been maintained at a satisfactory level.

There has been no outbreak of infectious disease and the work of the school has been carried on without any interruption from this cause.

During the year 32 children and one adult were admitted to the school. Of these 15 were county cases and 18 out-county cases. There were 38 children discharged from the school, of which 18 were county cases and 20 out-county cases.

In the following table particulars are given of the children admitted and discharged during the year.

	<i>Boys.</i>		<i>Girls.</i>		<i>Adults.</i>	<i>Total.</i>
	<i>Herts.</i>	<i>Out-County.</i>	<i>Herts.</i>	<i>Out-County.</i>		
Admissions	6	12	8	6	1	33
Discharged into care of parents	5	2	3	2	—	12
Discharged into care of parents pending admission to a Certified Institution	2	1	1	—	—	4
Discharged to other authorities	—	2	—	9	—	11
Discharged to other institutions	2	—	1	—	—	3
Discharged as unsuitable or otherwise dealt with	1	2	3	2	—	8
Total discharges	10	7	8	13	—	38

It will be seen from the above table that of the number admitted to the school during the year, 14 were county cases and 18 were out-county cases and that of those discharged 18 were county cases and 20 were out-county cases.

Improvement in Mental Condition.

3. There is not much that is new to report in connection with the mental condition of the children during the past year. All the children in the school are examined once a year as to their mental progress and reports regarding their response to instruction both in mental and manual work are submitted at the monthly meetings of the Managers of the school. Special attention is given to those children whose response to instruction is slow or unsatisfactory. There is always a certain number of children of a low grade and doubtfully educable type in whom any definite mental improvement cannot be expected and while it is not desirable, in the interests of the higher grade children, to retain such children in school it is at the same time extremely difficult to discharge them in the absence of a certified institution, more especially when the home conditions and home supervision are unsatisfactory.

The improvement in the mental condition of the higher grade children which results from the instruction given in the school is frequently quite striking and proves the value of the institution as an educational unit for mentally defective children.

Improvement in Physical Condition.

4. The general health and nutrition of the children during the year have been good. All the children have gained in weight and although a few of them lost weight while at home during the summer holidays the loss was quickly regained after returning to school. A steady increase in weight is one of the features of the physical condition of the children. This satisfactory state of the children's health and nutrition is due to the ordered routine which obtains in the school and to the generous and varied character of the food provided. Special attention is given to the diet of the children who are physically delicate or who are below standard weight.

There has been no serious outbreak of infectious disease during the year; such cases as occurred included two cases of whooping cough, two cases of chicken-pox, and five slight cases of ringworm. There was one death during the year, a boy with acute pulmonary aedema, who died in

the County Hospital in January. There were no serious accidents, although several children received treatment for cuts and bruises.

With regard to the health of the children during the year Dr. Ravensworth Hart, Medical Officer of the School, reports as follows :—

I beg to report that during the year 1928 the general health of the children at this school has been satisfactory, and the average physique somewhat higher than in past years.

The incidence of illness during the year was as follows: 2 cases of chicken-pox, 2 cases of whooping cough, and 5 cases of ringworm (slightly). Colds and minor febrile ailments occurred, but no general epidemic.

I have only one death to report, a case of acute pulmonary aedema; the boy died at the Hertford County Hospital on 20th January, 1928.

A number of minor accidents were treated at the school.

Ophthalmic examinations were made in the case of 49 children and treatment given or spectacles provided where necessary. 38 children received dental treatment and 24 were referred to the Hertford County Hospital for removal of enlarged tonsils and adenoids.

E. RAVENSWORTH HART.

Conclusions.

5. It is satisfactory to be able to report that the work of care, instruction and supervision of the children in the school has been carried out in a highly satisfactory manner during the year and that their health has been exceptionally good. The real value of the work of the school is, however, still impaired by the absence of a certified institution in the county to which children, who are unsuitable for retention in the school, could be sent, and where children on reaching the age of 16 could be received to continue and extend their instruction in useful manual work. If efforts are made to secure continuity of instruction in manual training in such an institution when it is provided, the value of the educational work carried out in Kingsmead School will be greatly increased. There is every prospect that the provision of such an institution in the county will be commenced during the year. It is also satisfactory to be able to state that from time to time reports are received from a number of former pupils showing that they are in employment and are doing well. The present history of the children discharged from the school since its opening to the end of 1928 is as follows :—

Total number	.	.	.	.	.	.	130
In institutions	.	.	.	.	.	.	33
In employment	.	.	.	.	.	.	15
In care of parents with partial employment	.	.	.	.	.	.	62
Not traced	.	.	.	.	.	.	20

H. HYSLOP THOMSON,
School Medical Officer.

Head Mistress's Report.

6. *Organization.*—Five graded classes, and one mixed ungraded class for academical subjects. For manual work subdivisions are made, to work in with available services of the technical instructors.

Reading and Writing.—Reading reaches the grade of Standard III to V, normal in upper division. Fluency and expression is difficult but knowledge of context read is retained, to enable reproduction by some children in their own words. Others cannot learn phonetics at all, though they gradually grasp words at sight. Junior grades get into primer and

readers I and II. At this stage, those children are found who cannot get beyond the manual stage. Writing in script lettering is used throughout in order to correlate with reading. Many children write a good, bold well formed hand, with marked individuality. Books are neat, clean and tidy. Upper grades are mostly very creditable, and can adopt the single line ruling. Lower grades write a good script formation, often when very poor at reading.

Number.—All first four rules and some money are attempted by upper grades. Most pupils can do the analysis of ten, addition and some subtraction. The other rules are mostly done with difficulty, especially in money. Time, weights, measures, etc., are taken in practical form. Every day familiar objects are used—Clock-face, rulers, scales, liquid measures, etc. Lowest grade have Montessori apparatus, which, besides sense-training processes also include initial activities for number, reading, writing and drawing. The response aroused is excellent, and gives good results even with most difficult types.

Drawing.—Although hand control is weak on the whole, through nervous temperamental difficulties, many children give neat attempts at nature specimens, designs, and laying on of colour, both in pastel and brush work. Some geometrical attempts are now made with compass, and any special aptitude is encouraged, and given every scope to develop.

Singing and Physical.—National, folk-lore and nature songs are taken, correlating seasonal work. Keen interest is shown, and soft sweet rendering with feeling can be developed. Imitative games, folk dancing, eurythmics, etc., are taken by all classes. Sense of rhythm is good, and these form a great part of the work, carriage being thus greatly improved. Some gymnastic exercises are taken with upper grade. These are very popular, boys showing keen pleasure. Indian clubs are now also added. The rapidity with which some boys and also girls picked up the wrist movements astonished me, and the exhibition of these at the Christmas Concert included really difficult movements which did credit to the children's keen desire to excel, especially taking into account the short time they had for preliminary training.

Manual Work.—Woodwork, bootmaking, rugwork, basketry, raffia-work, net-making, tapestry, and gardening for older boys. Needlework, plain and fancy, with use of sewing-machine (hand and treadle), embroidery, crochet, knitting, light basketry, leather work and gardening for older girls. Lower grades, weaving, winding, knotting, cutting, claywork, frame and reel knitting. Much of these activities were on show at Aldenham and Watford shows (three days). Over £30 was taken for sales. The best result was the added interest taken in our work, many visitors coming to visit the school in the following term, and giving further orders. In addition, the work on exhibit at Bushey "Arts and Crafts" show in December gained four First, one Second, and one Third prize awards.

Discipline.—No repressive methods are used. Self-expression and self-control are aimed at. Children choose and design much of their own work. Keen work obviates any trouble with discipline. Many show thought for others, love their school days, giving helpful loyalty and reverence, which is the teacher's greatest reward, creating a very happy atmosphere.

M. AGNES PULLAN,
Headmistress.

CHAPTER VIII.—STRUCTURAL AND SANITARY ALTERATIONS.

Special cards are supplied to the Assistant School Medical Officers on which to report the existence of structural or sanitary defects and any recommendations which it is considered necessary to make; on receipt of these cards particulars regarding the defects are forwarded to the County Surveyor:— There is little to report as regards structural and sanitary alterations. No serious defects have been notified by the Assistant School Medical Officers in the Annual Reports. In the Westmill School, Vita glass has been placed in the south window of the Infants' department through the kindness of a lady who is interested in the health of school children. The effect of this upon the health of the children during the past year has been noted. The general impression conveyed in comparing the children now with a year ago is that they are of better colour although the teacher states that the light is less satisfactory, especially during the short winter days, and that the children are more inclined to sleep.

CHAPTER IX. — OPEN - AIR INSTRUCTION — PHYSICAL TRAINING — JUVENILE EMPLOYMENT—HEALTH EDUCATION.

Open-air Instruction.—In previous reports reference has been made to the value of open-air instruction in improving the physical and mental condition of growing and delicate school children. This method of instruction is carried out in many schools in the county during the summer months, when the weather permits of the children sitting out of doors. Open-air instruction is of special value in the case of backward and defective children. It is an interesting fact that in the experience of several teachers the children who live some distance from school are in the morning more alert mentally than those who live close at hand.

Physical Training.—The value of physical training in improving the physical and mental welfare of the children in the schools is now so well recognized as to call for little emphasis. Care must be exercised, however, to exclude from such training children who are physically unfit for the effort which it entails.

This specially refers to the children with organic heart disease and latent tuberculosis who might suffer serious injury from undue physical strain resulting from muscular effort. For this reason it is desirable that there should be close co-operation between the School Medical Officer, the teacher and the Organizer of Physical Training, so as to exclude the possibility of any child engaging in games or exercises who is physically unfit for the muscular effort and movements required. Physical exercise and organized games have proved to be of very definite value in the physical and mental development of mentally backward and defective children. In the treatment of certain forms of physical defects in school children muscular re-education now occupies a prominent place.

The extent to which physical training is now carried on in the Schools in the County is indicated by the following extracts taken from the Annual Report of Mr. Richardson the Organizer of Physical Training.

its There can no longer be any doubt that Physical Training has taken stand in the curriculum as a subject of importance and it will remain as such so long as it is regarded as forming the basis for the education of the individual, and one of the best possible forms of discipline of both body and mind. It is only when this point of view is accepted and appreciated can substantial progress be made in its application.

Physical Exercises.

It is seldom that one witnesses a wrong type of lesson in the schools to-day ; the idea that a successful lesson must be one wherein " vigour " is the key note, as opposed to the mere performance of a few stiff uninteresting formal movements, is now firmly established. From this it must not be supposed that all lessons are perfect, but that we have now left behind " formal drill ", and are giving lessons that demand both mental and physical effort from the child. From this it will be seen that steady progress is being maintained although too little attention is still given to the " General Activity Group " of the table of exercises, the most enjoyable and important section of the work which is frequently curtailed or entirely neglected. If anything is to be deleted from the exercises, and there is no reason why there should, it should be the game which generally winds up the lesson, because each class gets at least one lesson per week devoted entirely to games.

Whilst it is important for teachers to concern themselves with the methods by which they teach the subject, it is more important to bear in mind what they are actually trying to teach, therefore, perhaps the most significant sentence in the Board's Syllabus of Physical Training is this, " The successful results of the lesson as a whole will be reflected in the improved carriage and glowing appearance of the children, who should give the impression when returning to the class room of having had a really good time."

Organized Games.

As a general rule the periods devoted to Organized Games are being more carefully planned and in this respect the Organization is generally speaking, better in the case of girls' games than of boys. In regard to the

latter it too frequently happens that children are taken on to the field, and the game usually football or cricket is commenced immediately. By such methods it is only the adept who thrives, and the raising of the standard of play of all the children is left to chance. This fault is probably more pernicious in the case of cricket than of football. There is no subject in the curriculum which is more conducive to waste of time than "Organized Games" unless it is well planned. It is necessary to repeat with emphasis that when a class proceeds to the playing field, it goes for definite instruction in the various phases of the game. Taking cricket as an example a games period might be planned somewhat on the following lines :—

A. Coaching period (say 10 minutes).

The class utilizing the team system will consist of four teams.

<i>Red Team.</i> —Fielding Practice under Team Leader.	} These practices might be taken in the form of games.
<i>Blue Team.</i> —Aiming and Throwing Practice "	
<i>Green Team.</i> —Catching Practice "	
<i>Yellow Team.</i> —Bowling Practice under Teacher."	

B. Playing the game itself (say 35 minutes).

Coaching, etc., to continue.

Team System.

In the last annual report it was pointed out that in very few schools was the team system being used effectively, that "leaders" were such in name only and that there was a distinct need for a fuller use of the special pamphlet issued by the Board on "The Team System".

It is a pleasure to record that there is a marked improvement in this respect, and that the teachers of the senior classes are giving more attention to this form of group training. It has been pointed out that to get the team system functioning correctly requires careful initial organization, and what subject does not if it is going to be successfully taught, but if a little trouble is taken at the beginning of the school year, sacrificing, if needs be one or two of the physical training lessons in order to give the children practical demonstrations of what is expected of them, then some really effective physical and moral training is possible,

A consideration of the following points might be of use to teachers of senior classes :—

(1) At the beginning of the school year ascertain the likely team leaders from among the children about to join the class.

(2) After due observation, etc., select leaders and vice-leaders with the help of the class, let them serve a probationary period of say one month, and give them some special coaching in their duties.

(3) Make out a list of "General Activities" to be taught, during the month by the teacher.

(4) Arrange a similar list of group activities to be taken under team leaders drawing on those which have been taught previously and including those in (3) as they are taught, and post it on the class notice board.

(5) As far as possible see that all "pitches" required are permanently marked in the playground. In the case of gravel playgrounds the choice of "pitches" is limited, but a scale can be painted on walls in order to read off "jumps." Marks or targets for aiming practice can also be placed on the walls.

(6) See that the " leaders " make out necessary charts for recording and that they themselves do the recording.

Playing Fields.

The position in regard to schools having access to a playing field during school hours is much more satisfactory than last year. The following information will show the nature and extent of the facilities available.

(a)	Number of Schools able to use fields privately owned	.	110
(b)	" " " public recreation grounds		61
(c)	" " " common land	.	30
(d)	" " having fields attached	.	12
(e)	" Fields leased by the Authority	.	10
(f)	" Schools without fields	.	15

But this is reviewing the position in its most favourable light and it is found that some schools do not use the fields (this has been dealt with in the earlier paragraphs of this report), a few are too far away from the ground for it to be used during school hours, the state of the surface of many of the grounds is poor, for many schools there is lack of privacy, and for the majority no security of tenure.

However, the first essential of seeing that all schools have access to grounds where an organized games lesson can be taken is almost an accomplished fact, and although much more remains to be done with regard to equipment, lay-out, etc., it is felt at the moment, that the position is satisfactory.

The County Playing Fields Association is now actively engaged in assisting local Councils to secure adequate playing space ; it has made grants to no less than 14 local bodies, 11 of which have included separate facilities for the elementary school children. The co-operation between the Association and the Authority is of the closest and should result in securing for the elementary school children, better and more adequately equipped playing fields.

Teachers' Classes.

During the year the following classes have been held, and in each case consisted of ten lectures, each of two hours duration.

Class.	Men.	Women.	Total.	Term.
Letchworth . . .	9	30	39	Easter.
Hemel Hempstead . . .	4	30	34	"
Stevenage . . .	5	27	32	Summer.
Cheshunt . . .	—	21	21	Autumn.
Hertford . . .	—	42	42	"
Total . . .	18	150	168	

The last two classes were for women only, the corresponding classes for men teachers were held last year.

Vacation Courses.—Five teachers took advantage of the Authorities' grant to attend a special course at Scarborough in order to secure training in the Syllabuses which are in use in Central Schools and Advanced Divisions. This training is already having an effect in the schools and it is hoped that a few grants will be available next year in order that all the senior schools shall derive similar benefit.

Summary.

It is safe to assume from the foregoing that there is a steady improvement all round in the matter of the children's physical education, and the signs for the future are even more hopeful when one considers that facilities are improving, both in regard to playgrounds and playing fields, that a free grant towards the cost of apparatus is to be made, paint is available for marking pitches in our playgrounds, and what is most important the increasing willingness of all teachers to co-operate.

In concluding this report, it is desirable to express appreciation of the valuable help given by the handwork staff and the continued good-will shown by all teachers.

Employment of Children.—With regard to the employment of school children it is necessary to point out that Section 13 (1) of "The Education Act, 1918", came into operation on the 1st day of April, 1920, and that the conditions which now prevail in the county with regard to the employment of children are as follows: (1) A child under the age of 12 shall not be employed, (2) a child of the age of 12 or upwards shall not be employed on any Sunday for more than two hours, (3) a child of the age of 12 or upwards shall not be employed on any day on which he or she is required to attend school before the close of school hours on that day, (4) a child of the age of 12 or upwards shall not be employed on any day before 6 o'clock in the morning nor after 8 o'clock in the evening.

Health Education.—A handbook of suggestions on Health Education has recently been issued by the Board of Education. This handbook outlines the general principles of hygiene upon which the health of the human body depends and with which the older pupils in school should be made familiar. As improvement in national health advances it becomes more and more evident that a stage will shortly be reached when no further improvement can be expected without the active and intelligent co-operation of the individual. For this reason it is important that instruction in the simple and accepted principles of hygiene should form part of every school curriculum.

CHAPTER X.—CONCLUSIONS.

The work of School Medical Inspection has been carried out in a satisfactory manner during the year.

The estimated number of inspections required was 12,832 and the actual number carried out was 15,812. The percentage

of defects found on examination for which directions were considered necessary was 47·9 compared with 49·8 last year. Schools were closed on 35 occasions, compared with 88 last year ; the chief cause being measles and diphtheria.

The general nutrition of the children was not quite so good as last year, but the number of children requiring treatment for this condition was distinctly less, being 0·9 compared with 1·3 for 1927.

It is satisfactory to be able to report further definite improvement in the cleanliness of the children. The percentage of children with uncleanliness of the head referred for treatment was 1·8 compared with 1·3 last year, while that of children with uncleanliness of the body referred for treatment was 0·7 compared with 1·0 for 1927. This improvement is mainly due to the excellent work and untiring efforts of the school nurses.

There is a slight increase in the percentage of children referred for treatment for defective vision, namely, 4·0, compared with 3·9.

There is a slight increase in the number of children with defective teeth, the percentage being 38·9, compared with 37·6 for the previous year, and the percentage referred for treatment being 20·3 compared with 21·6. Progress has to be reported in regard to the provision of facilities for dental treatment. A new scheme will shortly be initiated for the appointment of a second dental surgeon and for the establishment of new clinics or increased facilities for treatment in eleven new districts. New premises have been acquired for the dental clinic in Watford.

Twelve cases of definite pulmonary tuberculosis were recorded, compared with 11 cases last year.

There is a slight increase in the number of children referred for treatment for enlarged tonsils, namely, 8·2 per cent., compared with 8·0 per cent. for 1927. With regard to adenoids, it is satisfactory to note that the number referred for treatment is greatly decreased, namely 0·6 compared with 1·3 last year. There is a some decrease in the number of children referred for treatment for tonsils and adenoids occurring together, the percentage being 4·1 compared with 3·8 for the previous year.

Some enlargement of the cervical or submaxillary glands was found in 10·5 per cent., compared with 12·9 for the previous year. Some enlargement of the thyroid gland was found to be present in 49 children, compared with 24 last year.

The percentage of children referred for treatment for defective hearing was 0·3, compared with 0·4 last year. The num-

ber of children with deformities was 263, compared with 161 last year, the percentage referred for treatment being 0·8, compared with 0·7 for the previous year.

The percentage of children who have not been vaccinated continues to be far above what it should be in view of the presence of small-pox in the country. Of the 15,812 children examined the percentage of vaccinated was 34·9 and the percentage of not vaccinated 65·1.

The results obtained in the treatment of defects and minor ailments continue to be satisfactory, although the high level of last year has not been reached. The percentage of defects treated during the year was 77, compared with 80·4 for 1927. The percentage for Watford was 84·5 compared with 98·7 last year. These figures indicate the excellence of the good work carried out by the School Nurses.

TABLE I.—Return of Medical Inspections for 1928.

A. ROUTINE MEDICAL INSPECTIONS.

Number of Code Group Inspections.

Entrants	.	.	.	.	5,236
Intermediates	.	.	.	.	6,016
Leavers	.	.	.	.	4,419
Total					15,671

Number of other Routine Inspections 1

B. OTHER INSPECTIONS.

Number of Special Inspections	.	140
Number of Re-inspections	.	225
Total		<u>365</u>

TABLE II.

A.—Return of Defects found by Medical Inspection in the Year ended 31st December, 1928.

Defect or Disease.						Routine Inspection.		Specials.	
						Number referred for Treatment.	Number requiring to be kept under Observation.	Number referred for Treatment.	Number requiring to be kept under Observation.
Malnutrition						133	810	4	—
Uncleanliness—									
Head						192	245	—	1
Body						119	274	—	1
Skin .	{	Ringworm—							
		Head				2	1	—	—
		Body				1	4	—	—
		Scabies				8	3	2	—
		Impetigo				25	38	—	1
Eye .	{	Other diseases				33	30	1	2
		Blepharitis				82	55	—	1
		Conjunctivitis				10	12	1	—
		Keratitis				—	—	—	—
		Corneal Opacities				1	3	—	—
Ear .	{	Defective Vision				606	583	27	10
		Squint				155	81	1	1
		Other Conditions				6	14	—	1
		Defective Hearing				43	91	2	—
		Otitis Media				20	35	1	1
Nose and Throat	{	Other Ear Diseases				30	22	4	2
		Enlarged Tonsils				1279	1945	16	5
		Adenoids				101	129	1	—
Nose and Throat	{	Enlarged Tonsils and Adenoids				634	295	11	1
		Other conditions				—	—	—	—
Enlarged Cervical Glands (Non-Tuberculous)						494	1161	1	5
Defective Speech						13	69	—	—
Teeth—Dental Diseases						3187	2941	25	1
Heart and Circulation	{	Heart Disease—							
		Organic				16	65	—	1
		Functional				56	182	1	2
Lungs .	{	Anæmia				34	82	1	4
		Bronchitis				4	29	—	4
		Other Non-Tuberculous Diseases				70	77	3	2
Tuberculosis	{	Pulmonary—							
		Definite				4	7	1	—
		Suspected				4	3	—	—
		Non-pulmonary—							
		Glands				5	5	1	—
		Spine				1	2	—	—
		Hip				—	2	—	—
		Other Bones and Joints				—	1	—	—
Nervous System	{	Skin				—	—	—	—
		Other forms				1	2	—	—
		Epilepsy				1	8	—	1
		Chorea				3	1	—	—
Other conditions						18	12	2	—
Rickets						14	62	—	—
Deformities						125	130	3	5
Thyroid Glands						22	27	—	—
Other Defects and Diseases						98	119	7	3

B.—Number of Individual Children found at Routine Inspection to require treatment (excluding Uncleanliness and Dental Diseases).

Group.	Number of Children		Percentage of Children found to require treatment.
	Inspected.	Found to require treatment.	
Code Group—			
Entrants .	5,236	1,072	20·5
Intermediates .	6,016	1,314	21·8
Leavers .	4,419	861	19·5
Total (code groups)	15,671	3,247	20·7
Other routine inspections . . .	1	1	100·0

Table III.—Return of all Exceptional Children in the Area.

			Boys.	Girls.	Total.
Blind (including partially blind)	(i) Suitable for Training in a School or Class for the totally blind	Attending Certified Schools or Classes for the Blind	9	4	13
		Attending Public Elementary Schools	—	—	—
		At other Institutions	—	—	—
		At no School or Institution	—	—	—
	(ii) Suitable for training in a School or Class for the partially blind	Attending Certified Schools or Classes for the Blind	1	5	6
		Attending Public Elementary Schools	1	—	1
		At other Institutions	—	—	—
		At no School or Institution	—	1	1
Deaf (including Deaf and Dumb and partially Deaf)	(i) Suitable for training in a School or Class for the totally Deaf or Deaf and Dumb	Attending Certified Schools or Classes for the Deaf	10	15	25
		Attending Public Elementary Schools	—	—	—
		At other Institutions	—	—	—
		At no School or Institution	1	1	2
	(ii) Suitable for training in a School or Class for the partially Deaf	Attending Certified Schools or Classes for the Deaf	—	—	—
		Attending Public Elementary Schools	—	—	—
		At other Institutions	—	—	—
		At no School or Institution	—	1	1
Mentally Defectives	Feeble-minded (cases not notified to the local Control Authority)	Attending Certified Schools for Mentally Defective Children	75	43	118
		Attending Public Elementary Schools	9	9	18
		At other Institutions	—	—	—
		At no School or Institution	1	2	3
	Notified to the Local Control Authority during the year	Feeble-minded	—	—	—
		Imbeciles	—	—	—
		Idiots	—	—	—
			—	—	—

			Boys.	Girls.	Total.
Epileptics	Suffering from severe epilepsy	Attending Certified Special Schools for Epileptics	—	—	—
		In Institutions other than Certified Special Schools	—	—	—
Physically Defective	Suffering from epilepsy which is not severe	Attending Public Elementary Schools	1	—	1
		At no School or Institution	3	1	4
	Infectious pulmonary and glandular tuberculosis	Attending Public Elementary Schools	9	7	16
		At no School or Institution	1	2	3
	Non-infectious but active pulmonary and glandular tuberculosis	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	—	1	1
		At other Institutions	—	—	—
	Delicate children (e.g. pre-or-latent tuberculosis, mal-nutrition, debility, anæmia, etc.)	At no School or Institution	1	1	2
		At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	12	13	25
	Active non-pulmonary tuberculosis	At Certified Residential Open-air Schools	—	—	—
		At Certified Day Open-air Schools	—	—	—
	Crippled children (other than those with active tuberculous diseases), e.g. children suffering from paralysis, etc., and including those with severe heart disease	At Public Elementary Schools	1	—	1
		At other Institutions	—	—	—
		At no School or Institution	18	13	31
		At Certified Residential Open-air Schools	—	—	—
		At Certified Day Open-air Schools	—	—	—
		At Public Elementary Schools	822	721	1543
		At other institutions	—	—	—
		At no School or Institution	21	21	42
		At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board	17	5	22
		At Public Elementary Schools	—	—	—
		At other Institutions	—	—	—
		At no School or Institution	1	—	1
		At Certified Hospital Schools	—	—	—
		At Certified Residential Cripple Schools	7	3	10
		At Certified Day Cripple Schools	—	—	—
		At Public Elementary Schools	146	127	273
		At other Institutions	1	1	2
		At no School or Institution	2	1	3

Table IV.—Return of Defects treated during the Year ended 31st December, 1928.

TREATMENT TABLE.

GROUP I. MINOR AILMENTS (EXCLUDING UNCLEANLINESS, FOR WHICH SEE GROUP V).

Defect or Disease.	Number of defects treated or under treatment during the year.		
	Under the Authority's Scheme.	Otherwise.	Total.
Skin—			
Ringworm—Scalp	15	44	59
Ringworm—Body	—	9	9
Scabies	1	7	8
Impetigo	72	450	522
Other Skin Disease . . .	4	13	17
Minor Eye Defects— (External and other, but excluding cases falling in Group II.)	12	113	125
Minor Ear Defects	18	79	97
Miscellaneous— (e.g. minor injuries, bruises, sores, chilblains, etc.)	148	1116	1264
Total	270	1831	2101

GROUP II. DEFECTIVE VISION AND SQUINT (EXCLUDING MINOR EYE DEFECTS TREATED AS MINOR AILMENTS—GROUP I).

Defect or Disease.	Number of defects dealt with.			
	Under the Authority's Scheme.	Submitted to refraction by private practitioners or at hospital, apart from the Authority's Scheme	Otherwise.	Total.
Errors of Refraction (including squint) (Operations for squint should be recorded separately in the body of the Report) . . .	899	—	—	899
Other Defects or Disease of the eyes (excluding those recorded in Group I) .	—	—	—	—
Total	899	—	—	899

Total number of children for whom spectacles were prescribed :—

- (a) Under the Authority's Scheme 737
 (b) Otherwise Nil.

Total number of children who obtained or received spectacles :—

- (a) Under the Authority's Scheme 737
 (b) Otherwise Nil.

GROUP III. TREATMENT OF DEFECTS OF THE NOSE AND THROAT.

Number of Defects.				
Received Operative Treatment.			Received other forms of treatment	Total number treated.
Under the Authority's Scheme, in Clinic or Hospital.	By Private Practitioner or Hospital apart from the Authority's Scheme.	Total.		
1097	—	1097	—	1097

GROUP IV.—DENTAL DEFECTS.

(1) Number of Children who were :—

- (a) Inspected by the Dentist at the following Clinics : *St. Albans, Hatfield, Waltham Cross, Watford, Stevenage, Hertford, Hitchin, Letchworth Dental Clinics (County Council).*

Routine Age Groups 1,515
 Specials 2,753

Grand Total 4,268

(b) Found to require treatment 3,424

(c) Actually treated 2,755

(d) Re-treated during the year as the result of periodical Examination Nil.

(2) Half-days devoted to . { Inspection 7 } Total 444
 { Treatment 437 }

(3) Attendances made by children for treatment 4,887

(4) Fillings { Permanent Teeth 853 } Total 1,048
 { Temporary Teeth 195 }

(5) Extractions . . . { Permanent Teeth 1,372 } Total 9,178
 { Temporary Teeth 7,806 }

(6) Administrations of general anæsthetics for Extractions . . 1,041

(7) Other Operations . { Permanent Teeth 161 } Total 205
 { Temporary Teeth 44 }

(1) Number of Children who were :—

- (a) Inspected by Dental Surgeons in *Bishop's Stortford, Buntingford, Berkhamstead, Royston and Tring.*

Routine Age Groups 1,630
 Specials 127

Grand Total 1,757

(b) Found to require treatment 1,274

(c) Actually treated 615

(d) Re-treated during the year as the result of periodical Examination				41
(2) Half-days devoted to .	{ Inspection 17 } Treatment 76	Total		93
(3) Attendances made by children for treatment				810
(4) Fillings	{ Permanent Teeth 84 } Temporary Teeth 44	Total		128
(5) Extractions	{ Permanent Teeth 261 } Temporary Teeth 1,479	Total		1,740
(6) Administrations of general anæsthetics for extractions				220
(7) Other operations	{ Permanent Teeth 10 } Temporary Teeth 106	Total		116

(1) Number of Children who were :—

(a) Inspected by the Dentist at the *East Barnet, Harpenden, Welwyn and Welwyn Garden City Voluntary Dental Clinics.*

Routine Age Groups				460
Specials				360
Grand Total				820
(b) Found to require treatment				665
(c) Actually treated				544
(d) Re-treated during the year as the result of periodical Examination				<i>Nil.</i>

(2) Half-days devoted to .	{ Inspection 6 } Treatment 65	Total		71
(3) Attendances made by children for treatment				770
(4) Fillings	{ Permanent Teeth 79 } Temporary Teeth 139	Total		218
(5) Extractions	{ Permanent Teeth 165 } Temporary Teeth 1,252	Total		1,417
(6) Administrations of general anæsthetics for extractions				291
(7) Other Operations	{ Permanent Teeth 12 } Temporary Teeth 12	Total		24

1. Number of children who were inspected during the year at Schools outside the Clinic Areas :—

Kingsmead School, Hertford.

Inspected				130
Found to require treatment				37
Actually treated				37
Administrations of general anæsthetics				40

GROUP V.—UNCLEANLINESS AND VERMINOUS CONDITIONS.

(i) Average number of visits per school made during the year by the School Nurses				15
(ii) Total number of examinations of children in the Schools by the School Nurses (including examinations and re-examinations)				243,462
(iii) Number of individual children found unclean but not verminous				1,799
(iv) Number of individual children found verminous				397
(v) Number of times children have been cleansed and re-cleansed under arrangements made by the Local Education Authority				2,636
(vi) Number of cases in which legal proceedings were taken :—				
(a) Under the Education Act, 1921				<i>Nil</i>
(b) Under School Attendance Bye-laws				<i>Nil</i>